UNIT 10 TEST

60 marks

1 Fill the gaps using the correct form of the word in brackets at the end of each sentence. **10 marks**

Example: The fault was caused by an insecure connection. (connect)

1 Workshops can be dangerous so _____ procedures are essential. (safe)

2 Technicians need to ensure that all components are fully _____. (operate)

3 Radio contact can sometimes be affected by _____. (interfere)

4 _____ components must be checked regularly. (electric)

5 _____ procedures must be followed carefully. (maintain)

6 Avionics equipment should be fine-tuned for optimum _____. (perform)

7 TCAS stands for traffic alert and collision _____ system. (avoid)

8 In the old days, radio _____ aids were not very accurate. (navigate)

9 Most aircraft carry a flight data _____. (record)

10 In the case of electrical system _____, a warning light comes on. (fail)

2 These indirect questions all have a mistake in the word order. Write them with the correct word order. **10 marks**

Example: The pilot needs to know when is there a potential emergency situation.
The pilot needs to know when ***there is*** *a potential emergency situation.*

1 To prevent overheating, you need to know what is the temperature.

2 By checking the altimeter, the pilot can see what is the height of the plane.

3 The crew didn't know where was the fault.

4 The weather report informs the pilot if is there bad weather.

5 Pilots need to know how can weather conditions affect the safety of the flight.

6 The fuel gauge tells the pilot how much fuel is there in the tanks.

7 Radar enables the pilot to check how near are other aircraft.

8 Air traffic control asked the pilot what was his position.

9 The pilot needs to know what is the exact position of his aircraft.

10 The maintenance crew found where was the problem.

3 Choose one of the two verb forms to complete the sentences. 10 marks

1 The message *transmits* / *is transmitted* every 12.5 minutes.

2 Military time *is written* / *writes* in four digits.

3 The pilot *is selected* / *selects* an emergency radio frequency manually.

4 GPS works by *calculate* / *calculating* the distance to the satellite.

5 It is important *keeping* / *to keep* a safe distance between aircraft in flight.

6 Digital instruments *do not have* / *are not having* any moving parts.

7 Analogue devices are more likely *to affect* / *to be affected* by extremes of temperature and pressure.

8 An analogue voltmeter has a needle which *moves* / *has moved* from one position to another.

9 Digital instruments *become* / *are becoming* more and more popular.

10 They are simpler *to repair* / *to be repaired* than analogue instruments.

4 Fill the gaps in the sentences using prepositions.

10 marks

1 Pilots need to communicate _____ the ground at regular intervals.

2 They also need to have accurate information _____ weather conditions.

3 Whether a plane can fly at all can often depend _____ weather conditions.

4 The crew are responsible _____ checking the instruments are functioning correctly.

5 Controllers have to ensure that there is a minimum gap _____ two aircraft.

6 The amount of air traffic has increased _____ 40% in the last 10 years.

7 If there is a fault _____ the system, it must be repaired immediately.

8 A gyro compass consists _____ electrical, mechanical and electronic components.

9 The accuracy of GPS can be affected _____ atmospheric conditions.

10 The system calculates the distance _____ A and B.

5 Complete the questions using the words in the box and the pictures to help you. **10 marks**

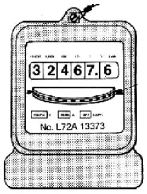
analogue	meter	instruments	circuit	components	flight	digital
board	diagram	electricity				

1 How many _____ _____ are needed to fly a plane?

For a small light aircraft, only six are necessary.

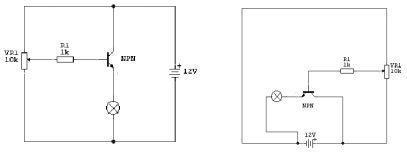
2 Why are _____ watches better than _____ watches?

Because they are cheaper and more accurate.



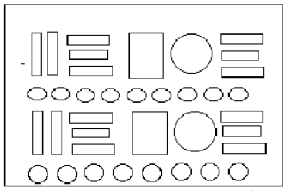
3 Why does an _____ _____ have a digital scale?

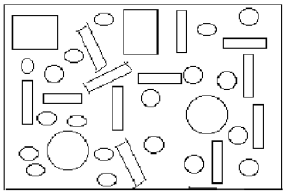
Because it is easier to read.



4 Which _____ _____ is clearer?

The first one. The second one isn't easy to interpret.





5 Why is it important to put the _____ in the right place on a circuit _____?

Because there can be electronic interference between them if they are not in the correct position.

6 Read this job description carefully and put in the missing words. The first and last letter of each word has already been written. **10 marks**

An avionics technician has to:

1 set up and operate ground support and test equipment to perform functional flight tests of electrical and e_ _ _ _ _ _ _ _ c systems.

2 test and t_ _ _ _ _ _ _ _ _ _ t instruments, components, and assemblies, using circuit testers, oscilloscopes, and voltmeters.

3 keep records of m_ _ _ _ _ _ _ _ _ e and repair work.

4 coordinate work with that of engineers, t_ _ _ _ _ _ _ _ _ s and other aircraft maintenance personnel.

5 i_ _ _ _ _ _ _ t flight test data in order to diagnose malfunctions and systemic performance problems.

6 i_ _ _ _ _ l electrical and electronic components, assemblies, and systems in aircraft, using hand tools, power tools, and/or soldering irons.

7 adjust, repair, or r_ _ _ _ _ e malfunctioning components or assemblies, using hand tools and/or soldering irons.

8 connect components to assemblies such as r_ _ _ o systems, instruments, magnetos, inverters, and in-flight refuelling systems, using hand tools and soldering irons.

9 assemble c_ _ _ _ _ _ _ _ s such as switches, electrical controls, and junction boxes, using hand tools and soldering irons.

10 f_ _ _ _ _ _ _ e parts and test aids as required.